up to 1:243 have been prepared in New Zealand White rabbits against red blood cells from specific mullet collected in St. Petersburg, Florida. These sera were cross reacted via agglutination precipitation tests against mullet red blood cells from various areas in Florida. The results of this study indicate common antigens with only slight variations in immunological characteristics.

BS-15 The Styrenes as Embedding Media for Electron Microscopy. EDWARD D. DeLAMATER, ERIC JOHNSON, THAD SCHOEN, CECIL WHITAKER, Florida Atlantic Univ.--The high viscosity and high surface tension of embedding media currently in use in electron microscopy inhibit adequate penetration of specimens. The styrenes, having viscosity and surface tension of less than 1, penetrate extremely rapidly and have proven especially effective for the embedment of shell, bone, and other hard materials. Styrene is inhibited from polymerization by tertiary butyl catechol. Styrene polymerization is initiated by methyl ethyl ketone peroxide. Methyl ethyl ketone peroxide apparently acts by overcoming the inhibition of the catechol acting as a source of free radical initiation. Polymerization is carried out under ultraviolet light with a wave length between 3400 and 4000 increments.

BS-16 Is rRNA the mRNA for Ribsomal Protein? JAMES C. LACEY, JR., JOHN R. JUNGCK, Univ. of Miami.--Our study demonstrates that the predicted messenger RNA for E. coli ribosomal proteins (based on their amino acid compositions) has a nucleotide composition very close to that of ribosomal RNA. In addition, there is a unique reading frame of the primary sequences of 5S ribosomal RNAs of E. coli and Homo sapiens KB Carcinoma cells in which no terminators appear. This indicates 5S ribosomal RNA could be translated into protein. Also, the fact that the frame is unique and evolutionarily preserved is consistent with Pieczenik's syntactical selection hypothesis. Our data imply that ribosomal RNAs are or were involved as messenger RNAs for ribosomal proteins.

BS-17 Cytochemistry of Core-like Structures in Group D Streptococci.* S. E. COLEMAN, A. S. BLEIWEIS, Univ. of Florida. - - Core-like sturctures have been reported in group D streptococci and postulated to consist of disorganized cell wall components or of teichoic acid.[1] These structures occur in cells in the stationary phase of growth. Thin sections of Streptococcus faecalis ATCC 8043 and an oral group D strain XL were stained by the silver methenamine method for polysaccharides. Cell walls stained heavily whereas the core-like structures did not stain. The cores were digested by the enzyme pronase but not by nucleases. These results indicate that core-like structures are partly protein but are not composed of nucleic acids or typical cell wall polymers. Freeze-etched preparations of unfixed bacteria showed cores to be hollow cylinders of the same form observed in fixed cells. The function of these structures is unknown.

*Research supported by grant DE 2901 from NIDR and a gift from Eli Lilly & Co.
1. R. G. McCandless et al., J. Bacteriol. 96. 1400 (1968)

BS - 18 Ecology, Vegetation and Topography of the Dry Tortugas Updated to 1970.* P. B. SCHROEDER, J.H. DAVIS, Univ. of Miami. - - The half-dozen islets which comprise the Dry Tortugas have been ecologically studied periodically since the turn of the century. In November and February a year ago, a field party from the University of Miami made a topographical and vegetational study of several of these keys. The pertinent information gathered at that time is now made available and provides continuity with the studies of Millspaugh (1907), Bowman (1918), and Davis